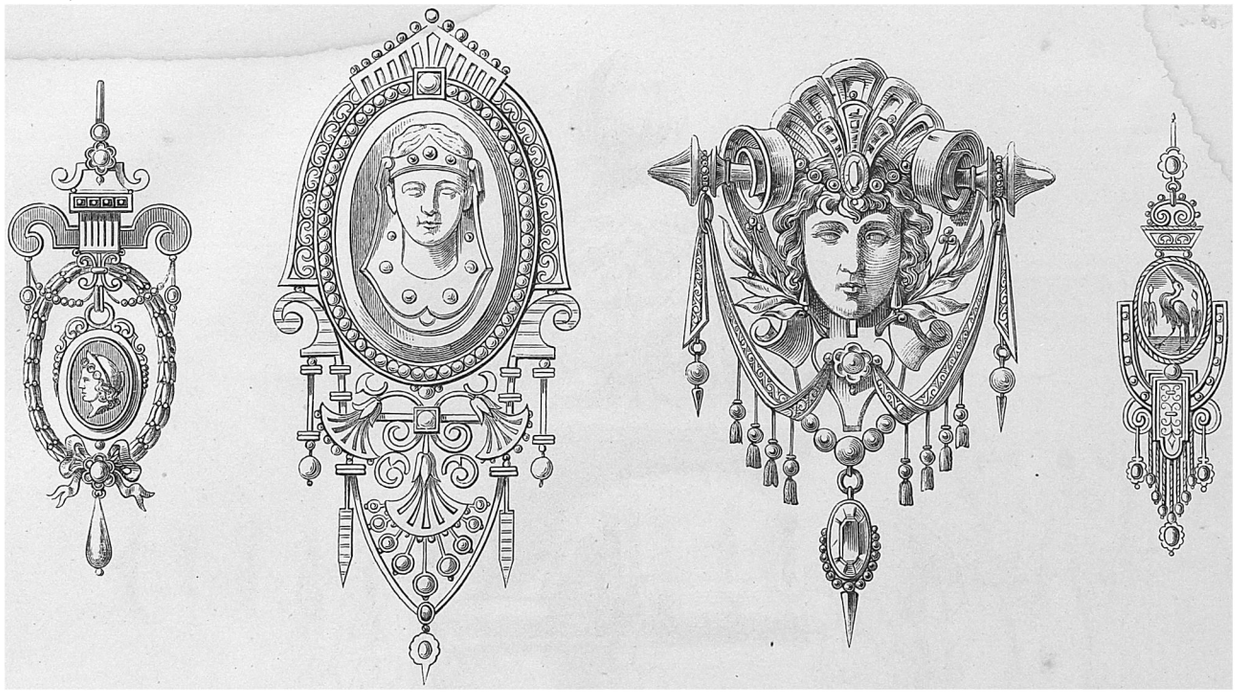

Nos. 25—28. Brooches and Ear-Pendants, designed and manufactured by Messrs. Mayer & Pleuer, Stuttgart.

VARIOUS.

Steel and Niello Work in Russia.

About the middle of the sixteenth century several iron-works and a manufactory of arms were founded at Tula, a small town situated about 150 miles to the south of Moscow. From that time, down to the present day, Tula has been celebrated for its works in iron. Peter the Great reorganised and extended the manufactory, and placed at the head of it an intelligent workman, called Demidoff, who ably carried out the designs of his master, and became the founder of one of the great Russian families. The excellence to which the workmen had attained in the reign of Catherine is shown by specimens which might easily be mistaken for works of first-rate French workmen of the period. From the East then, Tula workmen borrowed the art of producing *niello* work, for which they soon became famous. The process consisted of engraving on the steel or silver with a sharp-pointed instrument, and letting into the engraved lines a composition of sulphur, lead, and oil. The oldest specimen we have found shows a portrait of Peter the Great, so that it cannot be older than the end of the seventeenth century. Since the time of Catherine scarcely any artistic progress has been made. The *rococo* designs which she introduced are still almost exclusively employed, and the work is produced in a cheaper but much less durable way. The composition is no longer put into engraved lines, but simply laid on and passed through the fire.

Oil Parchment.

According to Dr. J. C. Hofmann's directions in "*Dingler's Journal*" for the preparation of what he calls oil-parchment the basis may be either linen or cotton cloth, or even strong paper. The material, whichever is chosen, is to be stretched out, and then covered with the following preparation: — One part of fine white lead, two thirds of a part of well-burnt ground and sifted plaster of Paris, and one fourth of a part of fine slaked lime are intimately mixed and ground with water until a perfectly smooth doughy mass is obtained. Then two-thirds of a part of best clear glue dissolved in sufficient water is gradually added until the mass is of such a consistance that it can be easily spread with a brush. Three or four layers of this are to be put upon the cloth, one being allowed to get thoroughly dry before another is put on. The last, when dry, is to be rubbed down smooth with pumice stone. The ground is now ready for the surface of oil or paint. If a white surface is desired a mixture of one part of best linseed-oil and one-third of well-bleached lead varnish alone is used; but this mixture, if wished, may be coloured yellow with ochre, red with cinnabar, blue with Prussian blue, or black with Frankfort black. Three or four thin layers of the paint may be applied, care being again taken that each coat is well dried before another is laid on. The oil, we are told, unites to the other surface so as to form a solid material, which is quite impervious to water, and cannot be rubbed off. The material so prepared may be written upon with a lead or coloured pencil, and the writing or drawing can be washed off again any number of times. It might be expected that the mixture with plaster of Paris, which forms the groundwork, would set into a solid mass too quickly to allow of three or four coats of the same mixture being applied, but the author gives no intimation of such a danger.

Keeping Bronze Statues Clean.

It was observed in Berlin that those parts of a bronze statue which were much handled by the public retained a good surface, and this led to the conclusion that fat had something to do with it. An experiment was therefore tried for some years with four bronzes: one, says our authority, *Chambers's Journal,* was coated every day with oil, and wiped with a cloth; another was washed every day with water; the third was similarly washed, but was oiled twice a year; and the fourth was left untouched. The first looked beautiful; the third which had been oiled twice a year was passable; the second looked dead, and the fourth was dull and black. Perhaps public authorities who have charge of statues and other adornments will profit by the experiment here described.

Stuttgart. Printing Office Fr. Brehm & Co.